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10/563,531	05/12/2006	Fredrik Gustavsson	0100508/0538460	1510

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EXAMINER
WACHSMAN, HAL D

ART UNIT	PAPER NUMBER
2857	

NOTIFICATION DATE	DELIVERY MODE
09/07/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/563,531

Applicant(s)

GUSTAVSSON, FREDRIK

Examiner

Hal D. Wachsmen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 8-15 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1-5-06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1. The drawings are objected to under 37 C.F.R. 1.84(h) because Figure 4 contains four views, Figure 6 contains two views and Figure 8 contains two views, however all of these views have not been labeled separately. Also all changes that are made to the labeling of the views in response to this Office action, should also be reflected in the Brief Description of the Drawings. Appropriate correction is required.

2. PALM records for the application refer to only one inventor Fredrik Gustavsson. However, the declaration indicates two other inventors Jonas Nilsson and Tony Gustavsson. That given, the Applicant may want to review the filing receipt for the application and consider submitting a filing receipt correction if needed. In addition, the declaration claims foreign priority benefits for PCT/EP2003/007282 filed 7-7-2003, however as the instant application is a 371 of PCT/EP03/007282 as indicated in the continuing data on the bibliographic data sheet of the instant application on PALM and there is not a certified copy of this PCT document in the application (if this document is being considered to be the prior foreign application in addition to being the PCT International Application), there is ambiguity with respect to what constitutes the basis for indicating the PCT document as a prior foreign application for the claim for foreign priority benefits. Appropriate explanation/correction is required.

3. The Abstract is objected to because it contains legal phraseology (i.e. "said correlation feature"). Appropriate correction is required.

4. The listing of references in the specification (see pages 15 and 16 of the specification) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the

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Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

5. The attempt to incorporate subject matter into this application by reference to "All publications and existing systems mentioned in this specification" (see page 21 of the specification) is ineffective because it does not clearly identify the referenced patent, application, or publication, and because a "system" in itself is not a patent, application or publication that can be incorporated by reference.

6. Claims 1-15 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 1, step c, cites "determining the velocity ... of the vehicle based on said correlation feature and the wheel spacing..." which does not particularly point out how exactly the correlation feature and the wheel spacing are being used to determine the velocity. This same type of problem also occurs in claims 13 and 14. The last line of claim 2 cites "...whereby the vehicle velocity ... is computed from the specific time difference" which does not particularly point out how exactly the specific time difference is being used to obtain the vehicle velocity. This same type of problem also occurs in the last 2 lines of claim 4. In several of the claims there is inconsistency with respect to what "(r)" represents. For example, in claim 3 this is the varying wheel radius however in claim 4 it is the respective unknown wheel radius as well as the specific wheel radius and in claim 8 it is the radii of the front and the rear wheels. Claim 5, line 6, cites "the

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front and rear wheel" which it appears should be "the front and rear wheels". Claim 10, line 1, cites "the absolute wheel radii" which lacks clear antecedent basis. This same type of problem also occurs in claim 15. Claim 11, line 2, cites "the absolute velocity" which lacks clear antecedent basis. This same type of problem also occurs in claim 12, line 2. In claim 14, line 9, it appears that the word "and" is missing after the semicolon. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 12, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 101***

9. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claim 14 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 14 states "A computer program product including program code....". However, page 21, lines 6-10, of the specification state:

"The embodiments of the *computer program products* with *program code* for performing the described methods include any machine-readable medium that is capable of storing or encoding the program code. The term "machine-readable medium" shall accordingly be taken to include, but not to be limited to, solid state memories, optical and magnetic storage media, and carrier wave **signals**."

A "signal" is not one of the four statutory classes of invention as it is not a "machine", "article of manufacture", "composition of matter" or a "process". Consequently, claim 14 is directed toward non-statutory subject matter.

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 8-10 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Naito et al. (5,557,552).

As per claim 1, Naito et al. (Abstract, figure 2(a), col. 15 lines 23-35) disclose "determining front and rear wheel speed signals..indicative of the time dependent behavior of the front and rear wheel speeds, respectively". Naito et al. (col. 6 lines 5-9, 15-25) disclose "correlating the front and rear wheel speed signals...indicative of the time delay..between the front wheel and rear wheel speed signals". Naito et al. (col. 7 lines 13-20, 32-35, col. 9 lines 7-15, col. 15 lines 35-45, col. 18 lines 47-64) disclose "determining the velocity..of the vehicle based on said correlation feature and the wheel spacing...".

As per claim 2, Naito et al. (col. 6 lines 15-25, col. 7 lines 13-20, col. 9 lines 7-18, col. 18 lines 52-64) disclose the feature of this claim.

As per claim 8, Naito et al. (col. 16 lines 4-8, col. 17 lines 12-16) disclose the feature of this claim.

As per claim 9, Naito et al. (figure 2(a), col. 6 lines 26-29) disclose the feature of this claim.

As per claim 10, Naito et al. (col. 16 lines 4-13) disclose the feature of this claim.

As per claim 12, Naito et al. (col. 6 lines 15-29) disclose the feature of this claim.

As per claim 13, Naito et al. (Abstract, figure 2(a), col. 15 lines 23-35) disclose "wheel speed sensors arranged to provide front and rear wheel speed signals..indicative of the time dependent behavior of the front and rear wheel speeds, respectively". Naito et al. (col. 6 lines 5-9, 15-25) disclose "a correlation unit arranged to

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correlate the front and rear wheel speed signals..in order to determine a specific correlation feature indicative of the time delay..between the front wheel and rear wheel speed signals". Naito et al. (col. 7 lines 13-20, 32-35, col. 9 lines 7-15, col. 15 lines 35-45, col. 18 lines 47-64) disclose "and to determine the velocity..of the vehicle based on the wheel spacing..and the correlation feature thus determined".

As per claim 14, Naito et al. (Abstract, figure 2(a), col. 15 lines 23-35) disclose "determine front and rear wheel speed signals..indicative of the time dependent behavior of the front and rear wheel speeds, respectively". Naito et al. (col. 6 lines 5-9, 15-25) disclose "correlate the front and rear wheel speed signals...indicative of the time delay..between the front wheel and rear wheel speed signals". Naito et al. (col. 7 lines 13-20, 32-35, col. 9 lines 7-15, col. 15 lines 35-45, col. 18 lines 47-64) disclose "determine the velocity..of the vehicle based on said correlation feature and the wheel spacing....".

As per claim 15, Naito et al. (col. 16 lines 4-13) disclose the feature of this claim.

### ***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naito et al. (5,557,552) in view of Miyazaki (6,354,675).

As per claim 11, Miyazaki (Abstract, col. 29 lines 12-19) teaches the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Miyazaki to the invention of Naito et al. as specified above because the road-friction conditions would have an effect on the velocity of the vehicle.

15. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and subject to the appropriate correction of the 37 C.F.R. 1.75(a) objections noted in paragraph 6 above.

16. The following references are cited as being art of general interest: Gustafsson et al. (WO 01/76925 A1) which disclose adaptive filter model for motor vehicle sensor signals, Gustavsson et al. (WO 2004/067307 A1) which disclose controlling wheel slip,

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Umeno et al. (6,264,292) which disclose a wheel condition estimating apparatus, Ai et al. (US 2006/0015288 A1) which disclose a speed sensing method and apparatus and Nakashima et al. (6,789,038) which disclose a tire condition estimating apparatus and method.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

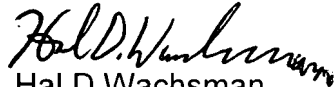
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
August 31, 2007